Probability Independent Events

Probability of Independent Events

Two bags each contain a different set of cards. A card from Bag 1 is chosen, and a card from Bag 2 is chosen. Find the probability of each event.

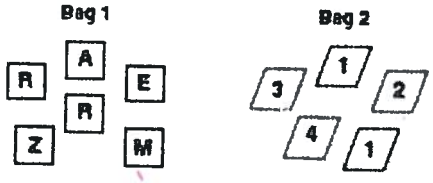
1. P(Z and 1)

2. P(R and less than 3)

3. P(vowel and 2)

4. P(*not* M and even)

5. P(E and *not* 4)



A rack contains one yellow kickball, four blue kickballs, and three red kickballs. One kickball is chosen from the rack without looking. Then it is replaced and another kickball is chosen. Find each probability.

6. P(red and blue)

7. P(yellow and yellow)

8. P(blue and yellow)

9. P(red and red)

10. P(yellow and red)

Maria and Lucy are each shopping for a pet. Maria wants a puppy and Lucy wants a kitten. The table shows the number of puppies and kittens at the pet shop.

Puppies		Kittens	
Breed	Number	Breed	Number
Dalmatian	2	Burmese	2
Golden Retriever	3	Himalayan	3
Labrador Retriever	1	Persian	2
Poodle	4	Siamese	1

For Exercises 11–14, refer to the table. Find each probability.

11. P(Maria chooses a poodle and Lucy chooses a Persian)

12. P(Maria chooses a Dalmatian and Lucy chooses a Siamese)

13. P(Maria chooses a Labrador retriever and Lucy chooses a Burmese or Himalayan)

14. P(Maria chooses a retriever and Lucy chooses a Himalayan)